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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,124	11/18/2003	Min-Jeong Kang	678-1104	6104

66547 7590 06/07/2010

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EXAMINER	
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ART UNIT	PAPER NUMBER
2629	

MAIL DATE	DELIVERY MODE
06/07/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/716,124	KANG ET AL.	
	Examiner	Art Unit	
	KIMNHUNG NGUYEN	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 April 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8,10-13,15 and 16* is/are rejected.

7)☒ Claim(s) *9 and 14* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *4/20/10*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This application has been examined. The claims 1-16 are pending. The examination results are as following.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-8, 10-13 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takada (US 5,850,477) in view of Sachs et al. (US 5,956,034).

As to claim 1, Takada discloses in fig. 2, a pen input device (11) comprising:

a touch screen panel (8) for receiving a pen input (11) from a user and displaying input data corresponding to the received pen input (see a handwritten character entered on a touch panel by using a pen is registered as one stroke data, see abstract);

an entry field generating portion (CPU2) for generating at least one displayed entry field (by pen input 11) inside a bound line (when pen input contacted the rectangular 52, 12B, then clearly the image of Richard Miller displayed inside a boundary line 52, fig. 12B) when the user draws the boundary line for forming an entry frame;

a controller (9) for performing a control operation in such a manner that the input data (Richard Miller 51, fig. 12B) is displayed spatially inside the generated entry field (52), and the entry field's size is newly set to be suitable for the input data's size (because the entry field has a

size and suitable to provide the ("Richard Miller" in fig.13), wherein resizing the entry field includes modifying at least one of a displayed length and displayed width of the entry field (see figs. 12-13, see "the display of "Richard Miller" has a length and width, and see if the display is magnified or reduced from the original data in order to standardize the display size, see col. 13, lines 64-66);

and a memory unit (7) for storing recognition information related to the entry field and the input data (because the memory 7 related CPU2, ROM and RAM, and correspondence to character inputted in handwriting to a size of width, see col. 11, lines 21-42). Takada does not disclose a resizing the entry field to be suitable for the input data's size whenever input data is input to the generated entry field.

Sachs et al. discloses in fig. 3B, a touch-sensitive display screen comprises a resizing the entry field to be suitable for the input data's size whenever input data is input to the generated entry field (see the size of the font on text 110 is display and can then be enlarged or reduce, see col. 6, lines 8-22).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement a input pen device comprising a touch-sensitive display screen comprises a resizing the entry field as taught by Sachs et al. into the system of Takada for producing the claimed invention because this would provide for the larger font sizes, an anti-aliased" display technique and thus to provide character smoothing (see Sachs et al., see col. 6, lines 20-22).

As to claim 2, Takada discloses further, wherein the entry field (rectangular region 52) generating portion generates the entry field by smoothing the boundary line based on a previously stored entry frame shape.

As to claim 3, Takada discloses further, wherein the entry field (52 includes a virtual cell 51), with a size (virtual cell 51 has a size) that is adjusted to be suitable for the size of the input data (see the created stroke data is displayed on the rectangular coordinates of a specific size being after the cursor display position, see col. 4, lines 45-45-48).

As to claim 4, Takada discloses further, wherein the input data is handwritten data (see abstract), the controller (9, because the control circuit 9 controls the CPU2, ROM and RAM) and correspondence to character inputted in handwriting to a size of width, see col. 11,lines 21-42) detects a beginning point and an end point of strokes of the handwritten data, and, provides information of a finally modified size of the virtual cell obtained when the end point is detected in the entry field generating portion (see fig. 14B, see start point of stroke data A and end point of stroke data B).

As to claim 5, Takada disclose further, wherein the entry field generating portion newly sets the entry field's size based on the information of the finally modified size of the virtual cell (51) (because the entry field has a size and suitable to provide the "Richard Miller" in figs. 12,13, and see the created stroke data is displayed on the rectangular coordinates of a specific size being after the cursor display position, see col. 4, lines 45-45-48, and see col. 13, lines 62-67).

As to claim 6, Takada discloses further, wherein the controller (9) recognizes the handwritten data of the virtual cell as one stroke group (see figs. 14A-14B), and converts the

recognized handwritten data to computer-recognizable data (see process of the program, see fig. 17).

As to claim 7, Takada discloses further, wherein, in response to a user's request, the controller sets an inherent attribute of a virtual cell of the entry field (see stroke A and B, fig. 15C).

As to claim 8, Takada discloses further, wherein the controller duplicates the entry field to generate a page-based database (see stroke data display coordinate table, see fig. 9) and enables the memory unit (7) to store the page-based database (because program is stalled in the memory, see col. 8, lines 52-64).

As to claim 10, Takada discloses in fig. 1, a pen input method comprising the steps of:

(a) generating, when a user draws a boundary line for forming an entry frame (when pen input contacted the rectangular 52, fig. 12B, then clearly, the image of "Richard Miller" displayed inside a boundary line 52, fig. 12B) through a pen input on a touch screen panel (see handwritten character entered on a touch panel by using a pen, see abstract, see col. 9, lines 66-67, col. 10, lines 1-3);

(b) detecting a boundary line of the entry frame (see division boundary line 52), setting an entry field based on the detected boundary line (see division boundary line, see fig. 12B), and generating a virtual cell (stroke 51, see figs. 12A-13) corresponding to the entry field for entering data;

(c) modifying the virtual cell's size (see stroke 51 has a size) in real time in response to entry of data into the virtual cell (see the created stroke data is displayed on the rectangular

coordinates of a specific size being after the cursor display position, see col. 4, lines 45-45-48); and

(d) when the entry of the data into the virtual cell is completed, newly setting the entry field to be suitable for the modified virtual cell's size (because the entry field has a size and suitable to provide the "Richard Miller" in figs. 12,13, (see the created stroke data is displayed on the rectangular coordinates of a specific size being after the cursor display position, see col. 4, lines 45-48, and see col. 13, lines 62-67), wherein resizing the entry field includes modifying at least one of a displayed length and a displayed width of the entry field (see figs. 12-13, see "the display of "Richard Miller" has a length and width, and see if the display is magnified or reduced from the original data in order to standardize the display size, see col. 13, lines 64-66). However, Takada does not specifically disclose resizing the entry field to be suitable for the entry of the data's size.

Sachs et al. discloses in fig. 3B, a touch-sensitive display screen comprises a resizing the entry field to be suitable for the input data's size whenever input data is input to the generated entry field (see the size of the font on text 110 is display and can then be enlarged or reduce, see col. 6, lines 8-22).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement a touch-sensitive display screen comprises a resizing the entry field as taught by Sachs et al. into the system of Takada for producing the claimed invention because this would provide for the larger font sizes, an anti-aliased" display technique and thus to provide character smoothing (see Sachs et al., see col. 6, lines 20-22).

As to claim 11, Takada discloses further the pen input method as set forth in claim 10, wherein, in the step (a), generating the at least one displayed entry field includes smoothing the boundary line based on a previously stored entry frame shape (see fig. 17).

As to claim 12, Takada discloses further the pen input method as set forth in claim 10, wherein, when the data entered into the virtual cell is handwritten data, the step (c) comprises the steps of:

(c1) detecting a beginning point and an end point of the handwritten data (see start point and end point of fig.15c);

(c2) modifying the virtual cell's size while displaying a trace of the handwritten data (see the created stroke data is displayed on the rectangular coordinates of a specific size being after the cursor display position, see col. 4, lines 45-45-48, and see col. 13, lines 62-67); and

(c3) storing information on the modified virtual cell's size during a period until the end point is detected (see end point of line segment Si, see fig.17, see col. 17, lines 62-67).

As to claim 13, Takada discloses the pen input method as set forth in claim 10, further comprising the step of:

(e) in response to a user's request, setting an inherent attribute of the virtual cell of the entry field (because the attribute of virtual cell of the entry field is dependent on the user's request).

As to claim 15 is rejected as the same claim 8.

As to claim 16 is rejected as the same claim 6.

Allowable Subject Matter

4. Claim 9 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: None of the cited art teaches or suggests that wherein the inherent attributes defines the entry field to be one of a fixed entry field in which the virtual cell's size and the entered data cannot be modified by the user, and a reserved entry field in which the virtual cell's size, and the entered data cannot be modified by the user, and defines a type of the entry data as claim 9 and 14.

Response to Arguments

5. Applicant's arguments filed 4/20/10 have been fully considered but they are not persuasive.

Applicant states that "Claims I and 10, which have been amended to recite "generating at least one displayed entry field inside a boundary line when the user draws the boundary line for forming an entry frame," these claims are patentable over Takada and Sachs".

"As illustrated in FIG. 3 of the present application, the present invention is directed to generating at least one displayed entry field inside a boundary line when a user draws the boundary line for forming an entry frame, resizing the entry field to be suitable for a data size of the input, and modifying at least one of a displayed length and a displayed with of the entry field. In the rejection of independent Claims 1 and 10, the Examiner compares the boundary lines of Claims 1 and 10 with the division boundary dividing line

of Takeda. (Office Action, page 3, citing Takeda at FIGs. 12-13 and column 13, lines 64-66).

Applicant also states that "in contrast to amended Claims 1 and 10, entry fields within the rectangular regions 52, 53, and 54 in FIGs. 12B and 12C of Takeda, for example, are not generated within a boundary line drawn by a user. More specifically, Takeda describes setting a rectangle 31 as a region for stroke data as follows:
Stroke data can be displayed in a rectangle (quadrangle) 31 for circumscribing the stroke data. This rectangle 31 is expressed as rectangular region of stroke data, and the dimensions of the rectangle 31 in X and Y direction may be stored by adding to the stroke data. The origin of coordinates stroke data is often set at one of four comers of the rectangle 31. (Takeda, column 10, lines 34-40). Therefore, for at least the reasons stated above, Takeda does not teach, disclose, or suggest "generating at least one displayed entry field inside a boundary line when the user draws the boundary line for forming an entry frame." , and "Sachs does not cure the deficiencies of Takeda".

Examiner respectively disagrees because Takada discloses in fig. 2, a pen input device (11) comprising: a touch screen panel (8) for receiving a pen input (11) from a user and displaying input data corresponding to the received pen input (see a handwritten character entered on a touch panel by using a pen is registered as one stroke data, see abstract);

an entry field generating portion (CPU2) for generating at least one displayed entry field (by pen input 11) inside a bound line (when pen input contacted the rectangular 52, 12B, then clearly, the image of Richard Miller displayed inside a boundary line 52, fig. 12B) when the user draws the boundary line for forming an entry frame.

It is notice that Takada discloses the boundary line is the division boundary line and also is "the boundary line" of the claimed invention.

However, Takada does not disclose a resizing the entry field to be suitable for the input data's size whenever input data is input to the generated entry field.

Sachs et al. discloses in fig. 3B, a touch-sensitive display screen comprises a resizing the entry field to be suitable for the input data's size whenever input data is input to the generated entry field (see the size of the font on text 110 is display and can then be enlarged or reduce, see col. 6, lines 8-22).

Therefore, the combination of Takada and Sachs et al. are satisfied for their intended purpose. For these reasons, the rejections are maintained.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KIMNHUNG NGUYEN whose telephone number is (571)272-7698. The examiner can normally be reached on MON-FRI, FROM 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on (571) 272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kimnhung Nguyen/

Examiner, Art Unit 2629